

## IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (currently amended) A method in a data processing system having a program, the method comprising the steps of:

providing a first processing engine to determine a solution to a problem, wherein the first processing engine subscribes to at least one of a plurality of datatypes that each contains a reference to a respective data item maintained separately from the plurality of datatypes, executes a processing using the data item responsive to receiving the subscribed to datatype, and publishes a processing result including a second datatype; and

providing a second processing engine to determine a solution to a problem that subscribes to the second datatype published by the first processing engine, the second processing engine executing a processing using the respective data item responsive to receiving the subscribed to second datatype and publishes a second processing result.

2. (original) The method of claim 1, further comprising the step of:  
retrieving a copy of the data item after receiving the datatype.

3. (original) The method of claim 1, further comprising the step of:  
saving the second datatype responsive to publishing the second datatype.

4. (currently amended) A computer-readable storage medium containing instructions that cause a program in a data processing medium to perform a method comprising the steps of:

providing a first processing engine to determine a solution to a problem, wherein the first processing engine subscribes to at least one of a plurality of datatypes that each contains a reference to a respective data item maintained separately from the plurality of datatypes, executes a processing using the data item responsive to receiving the subscribed to datatype, and publishes a processing result including a second datatype; and

providing a second processing engine to determine a solution to a problem that subscribes to the second datatype published by the first processing engine, the second processing engine executing a processing using the respective data item responsive to receiving the subscribed to second datatype and publishes a second processing result.

5. (currently amended) The computer-readable storage medium of claim 4, further comprising the step of:

retrieving a copy of the data item after receiving the datatype.

6. (currently amended) The computer-readable storage medium of claim 4, further comprising the step of:

saving the second datatype responsive to publishing the second datatype.

7. (currently amended) A data processing system comprising:

a memory having a program that provides a first processing engine to determine a solution to a problem, wherein the first processing engine subscribes to at least one of a plurality of datatypes that each contains a reference to a respective data item maintained separately from the plurality of datatypes, executes a processing using the data item responsive to receiving the subscribed to datatype, and publishes a processing result including a second datatype, and provides a second processing engine to determine a solution to a problem that subscribes to the second datatype published by the first processing engine, the second processing engine executing a processing using the respective data item responsive to receiving the subscribed to second datatype and publishes a second processing result; and

a processing unit that runs the program.

8. (currently amended) A data processing system comprising:

means for providing a first processing engine to determine a solution to a problem, wherein the first processing engine subscribes to at least one of a plurality of datatypes that each contains a reference to a respective data item maintained separately from the plurality of datatypes, executes a processing using the data item responsive to receiving the subscribed to datatype, and publishes a processing result including a second datatype; and

means for providing a second processing engine to determine a solution to a problem that subscribes to the second datatype published by the first processing engine, the second processing engine executing a processing using the respective data item responsive to receiving the subscribed to second datatype and publishes a second processing result.